

Metro's SmarTrip Card



Presentation for
Smart Card Program Managers Group
July 18, 2000

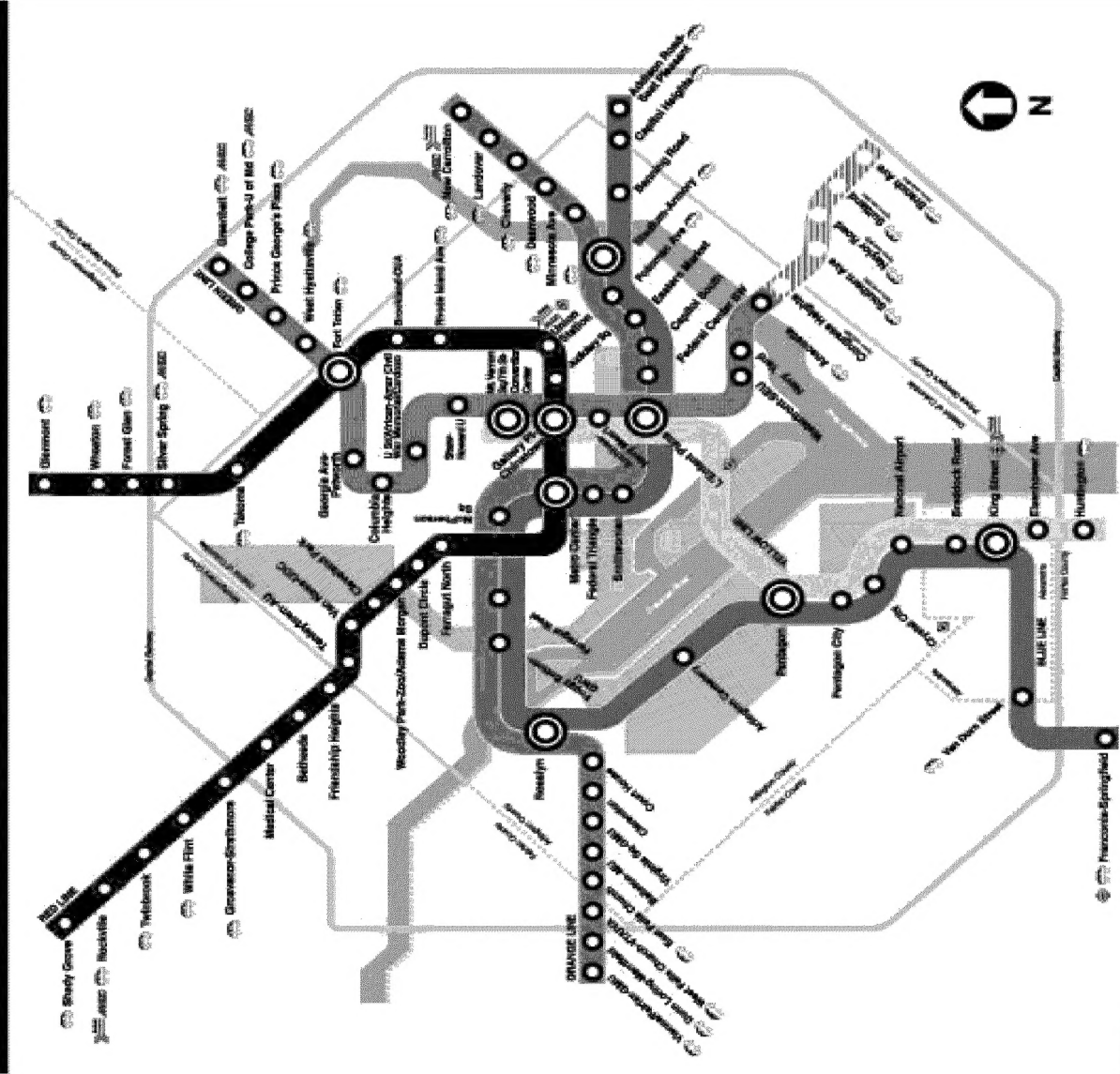
Washington Metropolitan Area Transit Authority

REPORT DOCUMENTATION PAGE			Form Approved OMB No. 074-0188	
Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing this collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503				
1. AGENCY USE ONLY (Leave blank)	2. REPORT DATE 7/18/2000	3. REPORT TYPE AND DATES COVERED Briefing 7/18/2000		
4. TITLE AND SUBTITLE Metro's SmarTrip Card		5. FUNDING NUMBERS		
6. AUTHOR(S) WMATA				
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Booz Allen & Hamilton 8283 Greensboro Drive McLean, VA 22102		8. PERFORMING ORGANIZATION REPORT NUMBER		
9. SPONSORING / MONITORING AGENCY NAME(S) AND ADDRESS(ES) Washington Metropolitan Area Transit Authority		10. SPONSORING / MONITORING AGENCY REPORT NUMBER		
11. SUPPLEMENTARY NOTES				
12a. DISTRIBUTION / AVAILABILITY STATEMENT Approved for public release; Distribution unlimited			12b. DISTRIBUTION CODE A	
13. ABSTRACT (Maximum 200 Words) A presentation about the metro's SmarTrip card.				
14. SUBJECT TERMS IATAC Collection, smart card, metro			15. NUMBER OF PAGES 37	
			16. PRICE CODE	
17. SECURITY CLASSIFICATION OF REPORT UNCLASSIFIED	18. SECURITY CLASSIFICATION OF THIS PAGE UNCLASSIFIED	19. SECURITY CLASSIFICATION OF ABSTRACT UNCLASSIFIED	20. LIMITATION OF ABSTRACT UNLIMITED	

System Context

- Approximately 3 million in service area
- Daily users
 - ◆ Rail - 300,000
 - ◆ Bus - 235,000
 - ◆ Paratransit – 1,000
- Approximately 1.2 million holders of fare media
- Vehicles
 - ◆ Rail cars – 764; 192 on order
 - ◆ Buses – 1,400
 - ◆ Paratransit – 134 (contractor-owned)

- Red Line • Green Line
- Orange Line • New Carrollton/Venue/Fairfax-QM2
- Blue Line • Addison Road-Soul Pleasant/Franconia-Springfield
- Green Line • Branch Avenue/Greenbelt
- Yellow Line • Huntington/MT, Vernon Sq/7th St-Convention Center
- Station
- Transfer Station
- Commuter Rail
- Parking
- Bike Rack
- Bus Stop
- Metro Accessible Station



Types of Fare Media

(pre-SmarTrip)

- **Metrorail - Magnetically encoded, stored value farecards**
- **Metrobus - Electronic registering fareboxes; cash coupons, tokens and tickets; passes**
- **Parking lots - Cash manually collected by parking attendants; monthly and guaranteed passes**

Fare Media Challenges

- Fare structure flexibility
 - ◆ Regular and discounted
 - ◆ Distance
 - ◆ Passes
- Bus and rail
- Throughput
- Commuter v. tourists
- Cost

The Smart Fares Program

- SmartDeals
- Fare Simplification and Integration
- June 1999

• SmartLink

- ◆ Internet Purchase
of Fare Media
◆ March 1999



The Smart Fares Program

- SmartCharge
 - ◆ Credit Card Purchase of Fare Media in Vendors
 - ◆ April 1999

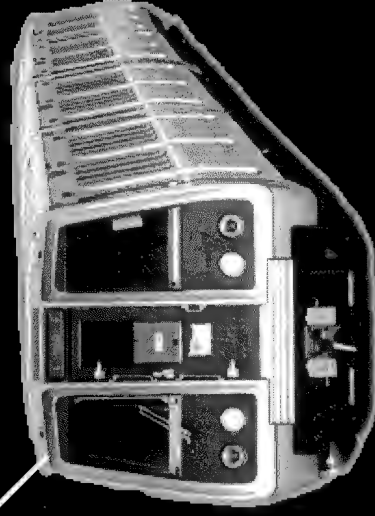
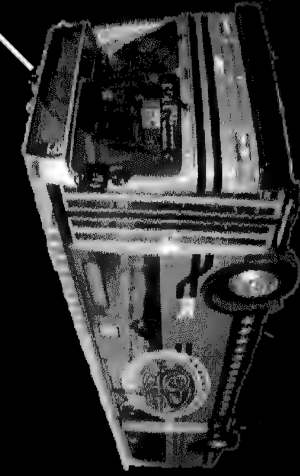


The Smart Fares Program

- SmartTrip
 - ◆ Smart Card
 - ◆ May 1999



APPLICATIONS



Key Elements of SmartTrip

- Batteryless
- Read/write chip
- Contactless radio frequency transmission
- Unalterable, unique serial number
- Closed system

Why Smart Card Technology?

- **Single fare medium; multiple fare types**
- **More secure than magnetic stripe**
- **Fast throughput**
- **May reduce operating and maintenance costs**

Why Smart Card Technology?

Potential Benefits to Customers

- Single fare medium across modes
- Replacement capability for lost or stolen cards
- Convenience

Smartrip Demonstration October 1998 to May 1999

- **1500 users - customers and employees**
- **Technical capability/full system test**
- **Customer acceptance/market**
- **Rail system - all stations and mezzanines**
- **Parking lots - all exits**
- **Recordkeeping, tracking**

SmartTrip Roll-out

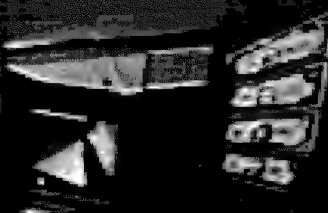
- Launched May 18, 1999
- Rail system and parking lots
- \$5 per card
- Privacy policy
- Card replacement



BILLS

\$1,5,10,20

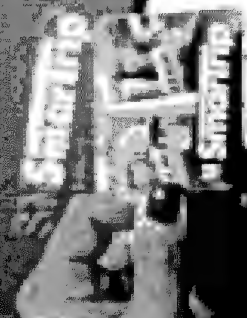
PUSH TO
RETURN



2

INSERT
PAYMENT

SmartTrip TARGET

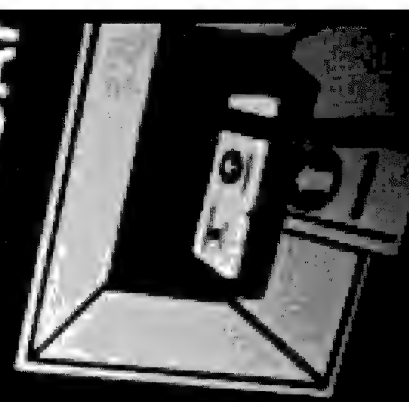


Insert Payment
RE-TOUCH SCREEN

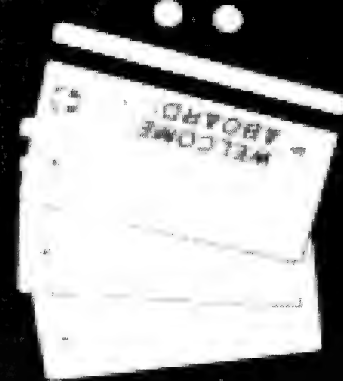
3

TAKE PASS/FARECARDS

TRADE-
FARECARD



To Purchase
or MULTIPLE



- Go To M
- Follow D



INSERT FARECARD
TOUCH STARTRIP





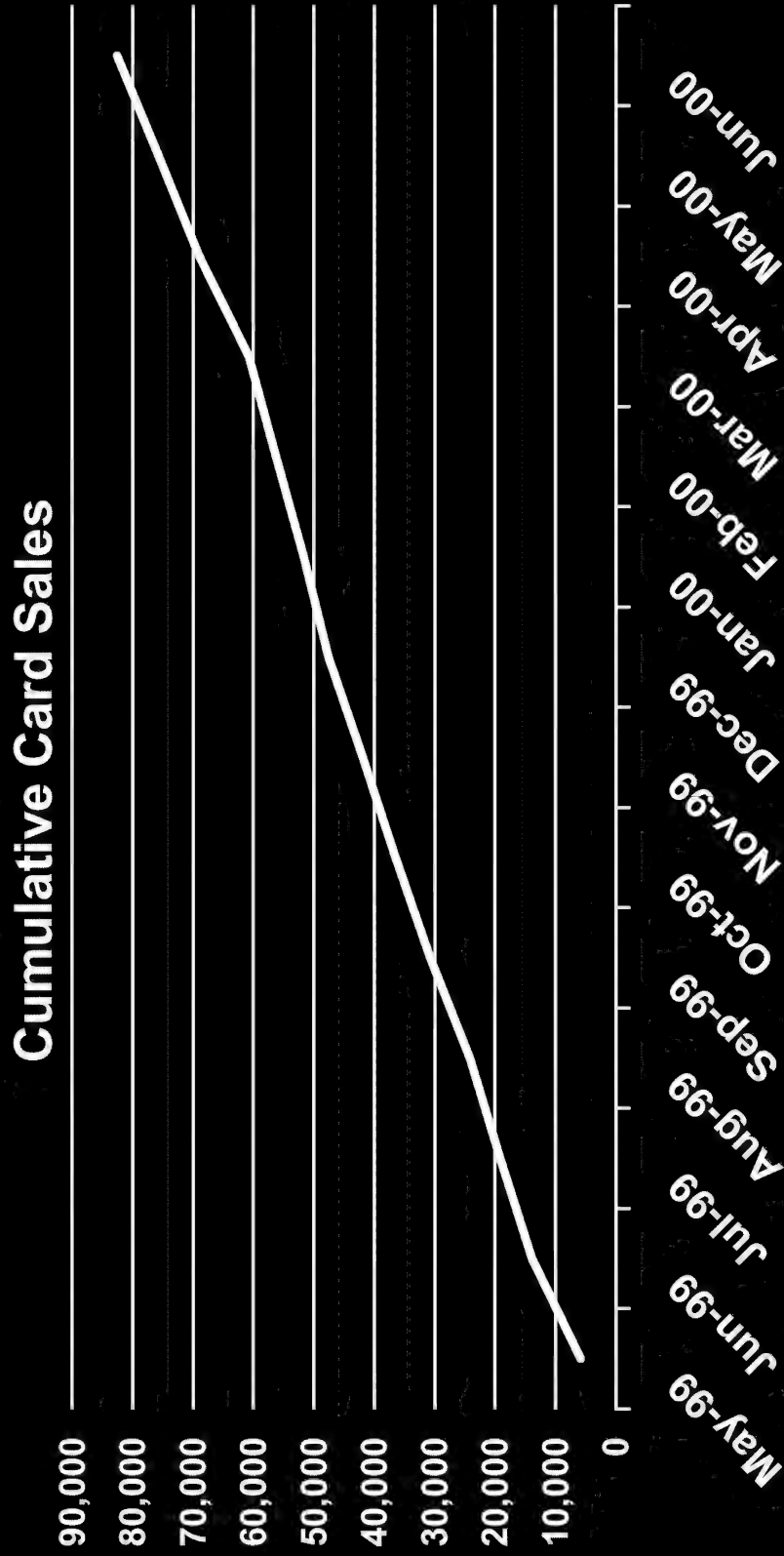








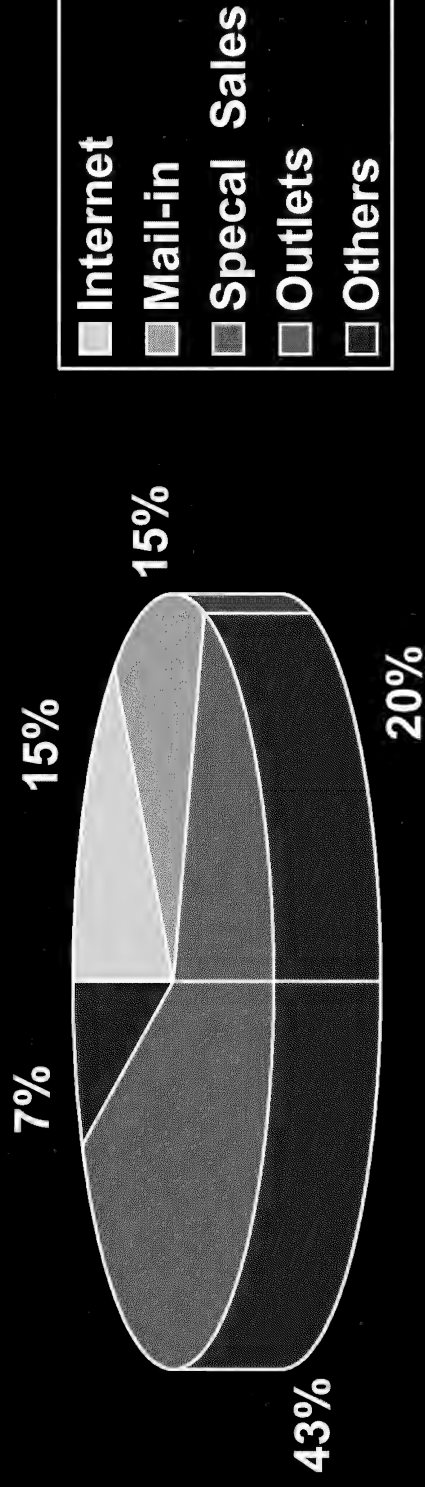
Card Sales



SmartTrip Sales Outlets

- Internet @
- WMATA-operated sales facilities
- Local government-operated sales facilities
- Special outreach promotional events
- Mail-in brochure available in the system

Card Sales by Source



Bus Fareboxes

- Procurement underway for regional box
 - ◆ Baltimore and Washington local transit systems
- Accepts
 - ◆ Coin and currency, validator-based
 - ◆ SmarTrip cards
 - ◆ Evaluating magnetic stripe card acceptance
- Fully implemented in 2002
- Regional clearinghouse

Demonstration Programs

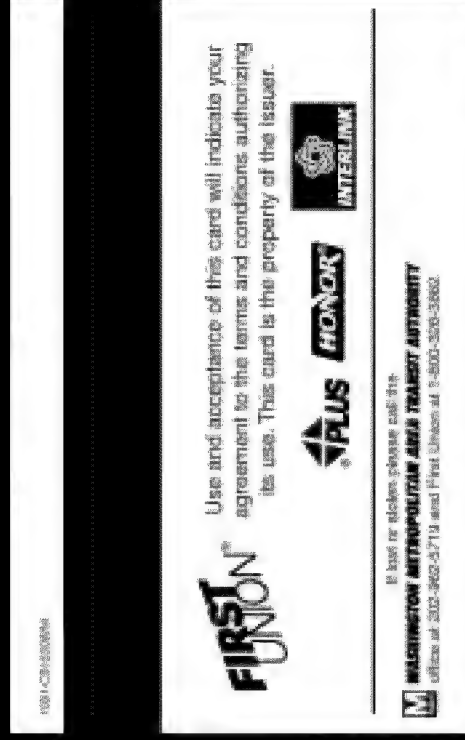
- **First Union/SmarTrip debit and transit card**
 - Approximately 1,000 participants
- **General Services Administration - ID and transit card**
 - Approximately 100 initial participants
- **Proposal for FTA's EPS demonstration program**
 - 14 private and public partners
 - Single card for transit, tolls, parking and retail

First Union Demonstration

- **Debit card and transit card**



Front



Back

General Services Administration

- Federal ID and transit card



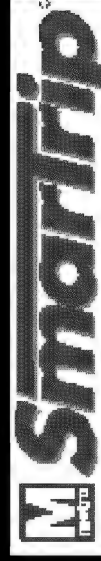
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Front



Back

GSA/SmartTrip Service 202.999.9999
If found, drop in any P.O. Box for return
to:
US General Services Administration
Security Office, CXXX
1800 F Street, NW
Washington, DC 20405

Near Term Enhancements

- Employer transit benefits
- Replenishments from credit account
- Customer loyalty program
- Passes
- Fair Fares

Potential Joint Applications

- Federal government
- Universities
- Government benefit programs
- Private industry

The Future

Metrorail

Metrobus

Metro Parking

**Convenience
Stores**

Restaurants



Fast Food

Movie Theatres

Sports Arenas

Toll Roads

**Gasoline
Stations**

Vision

- Create single card universal payment system
- Accepted throughout the region
- Good on transit, tolls and parking
- Expand acceptance to non-transit environments
 - ◆ Retail
 - ◆ Public benefit programs
 - ◆ Personal identification
- Design system to encourage use of transit, improve operations and foster public/private partnerships



Washington Metropolitan Area Transit Authority